

In re: Hwang, et al.
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REMARKS

Claims 1-6, 9-13, 17-23, 26-33, and 36-37 stand rejected under 35 U.S.C. § 102(b) as being anticipated by United States Patent No. 5,625,643 to Kaku et al. ("Kaku"). Based on Applicants' review of the Final Action, the rejections appear to be unchanged from those in the previous Office Action. Therefore, to facilitate the Examiner's reconsideration of the rejections, the remarks in this response will be directed only to the Response to Arguments and Information Disclosure Statement sections of the Final Action. However, Applicants' amendment mailed October 25, 2002 is incorporated herein by reference in its entirety.

Information Disclosure Statement

Applicants note the Examiner's assertion that copies of certain non-patent references were not provided. While Applicants disagree, Applicants submit herewith a copy of the PTO-1449 form with copies of the non-patent references, as they are clearly not currently available to the Examiner. Applicants also provide a copy of the postcard returned by the USPTO indicating that copies of the references were provided with the original filing and that these references were timely submitted by Applicant. As such, Applicants request that the Examiner consider the non-patent references and provide an initialed copy of the PTO-1449 form indicating consideration of the references. Applicants believe no fee is due and that they are entitled to consideration of the references in light of the apparent misfiling of the originally submitted documents by the Patent Office.

Response to Arguments

In paragraph 2 of the Response to Arguments section of the Final Action, the Examiner asserts that Kaku teaches "the limitation of updating a carrier drop detection threshold...based on the received signal ...responsive to a selected data pattern...in the signal data." Final Action, p. 2. Applicants disagree. As fully discussed in Applicants' previous amendment, Kaku describes a system that switches between first and second thresholds based on the presence or absence of a carrier. If a carrier is detected using the first threshold, then the threshold is set to the second threshold to determine that the carrier has been dropped. Kaku, col. 12, lines 25-33. Thus, Kaku's system is limited to only two possible threshold

levels. Furthermore, these thresholds "are determined in advance." Kaku, col. 12, lines 14-20. In other words, even were Kaku to disclose "updating a carrier drop detection threshold based on the received signal" as recited in Claim 1, it does not update the threshold values "responsive to a selected data pattern in the signal data." The system described in Kaku works independently of the data patterns in the signal. It merely selects between two predetermined fixed threshold levels and compares this selected threshold to the received signal power. Kaku, col. 11, lines 19-25.

However, Claim 1 recites updating the threshold level "responsive to a selected data pattern in the signal data". Thus, the threshold level is not fixed or determined in advance. Rather, Claim 1 allows for variable threshold levels, by establishing different threshold levels based on individual data pattern(s) contained in each received signal. Nowhere does Kaku disclose such variable threshold levels based on a selected data pattern in the signal data. Accordingly, Applicants respectfully request that the Examiner reconsider the present rejections or explain how Kaku can be properly interpreted as disclosing updating the threshold level "responsive to a selected data pattern in the signal data" as recited in Claim 1 (and corresponding recitations of the other claims).

In paragraph 3 of the Response to Arguments section of the Final Action, the Examiner asserts that Claim 17 does not recite "a threshold circuit latching a carrier drop detection threshold." Final Action, p. 2. Instead, the Examiner states that "the receiver circuit can latch a carrier drop detection threshold...and the threshold circuit is just coupled to the receiver circuit." Final Action, pp. 2-3. However, Claim 17 recites "a threshold circuit coupled to the receiver circuit that latches a carrier drop detection threshold". Applicants submit that, when read in light of the specification, it is the threshold circuit, and not the receiver circuit, that latches a carrier drop detection threshold. Specification, p. 10. Accordingly, Applicants respectfully request that the Examiner reconsider the present rejection.

In paragraph 4 of the Response to Arguments section of the Final Action, the Examiner states that "Kaku's fig 7 is updating the threshold...based on the JM or CM signal since fig. 7 is a modem ...and thus it is a call and answer modem depending on its action at a particular time." Final Action, p. 3. However, the system described in Kaku does not appear

to contain any recitation of CM and/or JM signals. Applicants assume that the Examiner is inferring that the modem described in Kaku would receive such signals in use. However, even if the modem disclosed in Kaku's fig. 7 was described as receiving CM and JM signals, **Kaku does not disclose or suggest using the CM or JM signals as a trigger** for latching a carrier drop detection threshold. In fact, Kaku does not distinguish any particular received signal as being treated differently with respect to carrier drop detection. In contrast to the system of Kaku, Claim 17 recites latching the threshold value based on receipt of the CM or JM signal. Thus, Applicants submit that independent Claim 17 is neither disclosed nor suggested by Kaku. Applicants respectfully request that the Examiner reconsider the present rejections or explain how Kaku can be properly interpreted as disclosing "a threshold circuit...that latches a carrier drop detection threshold...responsive to detection of at least one of the CM and the JM signal", as recited by Claim 17.

In paragraph 5 of the Response to Arguments section of the Final Action, the Examiner states that Claims 3, 13, 20, and 30 do not recite "latching a signal strength based on detection of a selected bit pattern". Final Action, p. 3. Applicants believe that the Examiner may have misunderstood the related "and/or" statement in the Applicants' previous amendment, which referred to two different recitations between Claims 3, 20, and 30, as compared with Claim 13. Claims 3, 20, and 30 recite setting "a flag to indicate receipt of at least one of a valid CM and a valid JM signal" and latching a signal strength "responsive to setting of the flag". Therefore, Applicants respectfully submit that Claims 3, 20, and 30 indeed recite latching a signal strength based on detection of a valid CM or JM signal. Claim 13 recites latching the output of an energy detector "responsive to the selected data pattern in the signal data". Thus, Applicants respectfully submit that Claim 13 recites latching based on detection of a selected data pattern.

Also in paragraph 5, the Examiner states that Kaku teaches establishing a threshold based on latched signal strength, because "[i]n Kaku fig. 9, the latched signal strength is P. Threshold level is adjusted...based on P." Applicants submit that Kaku merely describes **selecting** between two predetermined fixed thresholds, as discussed above. Kaku does not describe **setting** threshold values based on the latched received signal strength, which would allow, for example, many variable threshold levels instead of just two. Furthermore, Claims

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3, 14, 20, 23, 30 and 33 recite setting the carrier drop detection threshold to a predetermined amount below the measured level. The cited portions of Kaku do not disclose or suggest setting the carrier drop detection threshold to an amount below a level measured when a particular data pattern (or the CM or JM signals) are detected. The comments in paragraph 5 fail to even address these additional recitations. Accordingly, Applicants respectfully request that the Examiner reconsider the present rejections or explain how Kaku can be properly interpreted as disclosing a carrier drop detection threshold that is set based on the measured level or set to a predetermined amount below the measured level.

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CONCLUSION

In light of the above remarks, Applicants respectfully submit that the above-entitled application is now in condition for allowance. Favorable reconsideration of this application is respectfully requested. If, in the opinion of the Examiner, a telephonic conference would expedite the examination of this matter, the Examiner is invited to call the undersigned attorney at (919) 854-1400.

It is not believed that an extension of time and/or additional fee(s)-including fees for net addition of claims-are required, beyond those that may otherwise be provided for in documents accompanying this paper. In the event, however, that an extension of time is necessary to allow consideration of this paper, such an extension is hereby petitioned under 37 C.F.R. §1.136(a). Any additional fees believed to be due in connection with this paper are hereby authorized to be charged to Deposit Account No. 09-0461.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Rohan G. Sabapathypillai".

Rohan G. Sabapathypillai
Registration No. 51,074

Myers Bigel Sibley & Sajovec
P.O. Box 37428
Raleigh, NC 27627
(919) 854-1400 phone
(919) 854-1401 fax

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on September 16, 2003.

A handwritten signature in black ink, appearing to read "Traci A. Brown".
Traci A. Brown